ABSTRACT OF THE DISCLOSURE

One or more techniques are provided for identifying a period of minimal motion for an organ of interest, such as the heart or lungs. Motion data is acquired for the organ of interest and for one or more proximate organs using sensor-based and/or image-based techniques. The sensor-based techniques may include electrical and non-electrical techniques. The image-based techniques may include both pre-acquisition and acquisition image data. The motion data for the organ of interest and proximate organs may be used to generate a set of multi-input motion data that may be processed to identify desired periods, such as periods of minimal motion, within the overall motion of the organ of interest.